UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

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REPLY TO THE ATTENTION OF

H8E-5J

Date: SEP 22 1994

Subject: ACTION MEMORANDUM Request for a Time-Critical Removal Action at Sauget Area 2, Sauget and Company Landfill (Site Q), Sauget, St. Clair County, Illinois (Site ID# XX)

From: Sam Borries, On-Scene Coordinator Donald Bruce
for Response Section II

Thru: Richard Karl, Chief Donald Bruce
for Emergency & Enforcement Response Branch

To: Jodi Traub, Associate Division Director
Office of Superfund

I. PURPOSE

The purpose of this memorandum is to request and document approval to expend up to $218,600 to abate an imminent and substantial threat to public health and the environment which exists at the Sauget Area 2, Sauget and Company Landfill (Site Q), in St. Clair County, Sauget, Illinois.

The response action proposed herein will mitigate threats to public health, welfare, and the environment posed by the presence of uncontrolled hazardous wastes located at the site. Site contaminants consist of polychlorinated bi-phyenls (PCBs) and semi-volatile organic compounds. Mitigation efforts will include excavation of any buried or partially exposed drums, and any surface drums located along the Mississippi River where the landfill cover has eroded exposing Site Q waste material. Continuing threats of release require that this removal be classified as time critical. The project will require an estimated 10 on-site working days to complete.

This site is not on the National Priorities List.

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II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID #ILD000605790

Sauget Area 2 Site Q background information was obtained from site files, including an Illinois Environmental Protection Agency (IEPA) Extended Site Inspection (ESI) Report. Site Q of Sauget Area 2, which, along with Sauget Area 1, is part of the Dead Creek Project (DCP), or Sauget Sites (SS). The Sauget Sites are located in west-central St. Clair County, Illinois, directly across the Mississippi River from St. Louis, Missouri. The DCP sites consist of a number of former municipal and industrial waste landfills; surface impoundments or lagoons; surface disposal areas; past excavations thought to be filled or partially filled with unknown wastes; and an areal drainage flowpath known as Dead Creek.

According to site file information, Site Q is a former subsurface/surface disposal area which occupies approximately 90 acres. The site is located in the cities of Sauget and Cahokia, Illinois, and is bordered by DCP Site R and the old Sauget Power Plant on the north; the Illinois Central Gulf Railroad and a United States Corps of Engineers (U.S. COE) river levee on the east; agricultural land on the south; and the Mississippi River on the west. Waste disposal activity occurred between 1962 and 1975.

The primary drinking water source for nearby residences is from a water intake along the Mississippi River, approximately 3 miles north of the DCP sites. At least 50 residents in the area obtain drinking water from private wells, based on Illinois Department of Public Health (IDPH) information. The nearest drinking water well is located on Judith Lane, approximately 1 mile east and upgradient of Site Q. Over 8 industrial wells are located within a 3-mile radius.

The land surrounding the site is used primarily for industrial purposes. Commercial activities are located northeast of the site. The nearest residential area is approximately 1.5 miles southeast from the site and also 1 mile west from the site across the Mississippi River.

Site Q was submerged during the 1993 Mississippi River floods and apparently had a portion of its cover material eroded away, exposing deteriorated drums which were buried in the landfill. The drums were initially discovered and reported to the U. S. Environmental Protection Agency by the Illinois Environmental Protection Agency site assessment personnel.

According to aerial photographs of the area, initial activities were noticed in 1955, with a marked increase in activity in 1962. In 1973, landfill operations appeared to have ceased in the northern portion of the site, but continued in the southern portion. In January of 1975, IEPA inspected the site and indicated disposal activities had ceased.

In May of 1980, IEPA received notice that chemical wastes and drums were uncovered during excavations for a railroad spur at the site. Construction workers became nauseous, but specific worker exposure information was not found. In May of 1981, the Illinois Attorney General filed suit against Sauget & Co. for alleged violations against IEPA regulations.

A number of investigations have taken place at Site Q. In October of 1981, IEPA sampled seeps along the site and results showed high concentrations of organic compounds. In June 1983, as a result of finding buried drums at the northern section of the site, a U.S. EPA Field Investigative Team (FIT) contractor collected 33 subsurface soil samples at the site. A total of 63 of 112 organic compounds from the priority pollutant list were detected, including 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin).

In October of 1984, the IEPA conducted inspections in order to determine the scope of proposed cleanup work at the site. According to records, chemical wastes were disposed at Site Q, but no specific information concerning waste characteristics was available. However, analytical results of samples taken from the subsurface soil samples on-site revealed a variety of organic compounds. Ecology & Environment, Inc. (E&E), under an IEPA contract, conducted an Expanded Site Investigation (ESI) of the DCP sites from 1985 to 1987 detailing assessment information from the DCP sites.

In March of 1985, the Illinois Attorney General's office reentered a suit against Sauget & Co., ordering a final cover over the site and requesting a civil penalty. According to site file information, aliphatic hydrocarbons, chloroanilines, chlorobenzenes, chloronitrobenzenes, chlorophenols, dioxins, dibenzofurans, naphthalenes, polychlorinated biphenyls (PCBs), phenanthrene, phenol, and pyrene were identified at Site Q.

According to IEPA's Paul Takacs, as a result of the severity of last year's flooding along the Mississippi River basin, the integrity of Site Q landfill's riverbank had been eroded, exposing numerous previously buried drums. Some of these drums have spilled their contents onto the beachfront. IEPA collected a sample from one drum and the results indicated high levels of PCBs. The U.S EPA and IEPA returned to the Sauget Area 2: Site Q to assess the potential threat to human health and the environment as a result of these drums.

On May 27, 1994, E & E TAT member Steve Skare, U.S. EPA OSC Samuel Borries, and IEPA officials Paul Takacs and Kim Hubbard met at the Sauget Area 2, Site Q. In the central portion of the site, a metal reclamation operation was separating metal rebar from concrete debris piles, just east of the river levee. A railroad spur is located south of the metal reclamation operation. At the western edge of the landfill, a 12-foot drop-off leads down to the beach

and waters edge of the Mississippi River. To the north of the site lies an active chemical fertilizer company and a bulk chemical transfer company.

On the beachfront and protruding from the side of the landfill along the rivers bank are approximately 12 corroded 55-gallon drums without any markings. Most of the drums were open and contained a hard, chocolate-brown colored solid material. No readings above background were recorded on the HNU photoionizer. A total of 3 drum samples were collected during the May 27th investigation. Sample QD1 was collected from a drum on the beachfront, just below the landfill boundary. Drum sample QD2 was collected from an unmarked drum along the edge of the landfill. Drum sample QD3 was collected from a protruding drum at the top edge of the landfill.

The solid material sampled from the drums contained polychlorinated biphyenls (PCBs). PCB Arochlor 1260 was detected in samples QD1 (180,000 ppm), QD2 (260,000 ppm), and QD3 (230,000 ppm). Sample QD1 also qualitatively detected various semi-volatile organic compounds which includes phenol (69,000 ppm), acenaphthene (44,000 ppm), and pentachlorophenol (20,000 ppm).

III. THREATS TO PUBLIC HEALTH OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Sauget Area 2, Site Q present an imminent and substantial threat to human health, welfare and the environment and meet the criteria for a removal action as stated in the National Contingency Plan (NCP), Section 300.415(b)(2), specifically:

a) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

Analytical results from the drum samples collected on May 27 1994, indicate the presence of hazardous substances at the Sauget Area 2, Site Q. The potential exists for trespassers, vandals, or scavengers to come in contact with hazardous substances, especially from contaminated soils and from deteriorated drums in exposed areas. Plants and animals can come in contact with hazardous substances and can pass along contaminants via the food chain to larger animal species, and potentially to humans.

b) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.

The OSC and TAT observed approximately 12 unearthed drums during the site visit. Most of the drums had corroded or deteriorated, and were open to the environment. Evidence of drum spillage was noted around the drum area near the western edge of the landfill.

A potential exists for many more drums under the surface that could pose a threat of release if immediate action is not taken. High levels of PCBs (up to 26%) were documented in samples collected from the drums. Unauthorized users of the property could accidentally or intentionally dump or move these containers, causing the potential for release of hazardous substances.

c) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

Drum samples collected by TAT contained high levels of PCBs. During storm events or periods of high winds, exposed drum contents, and associated potentially contaminated soil, can migrate via drainage paths off-site to navigable waterways, including the nearby Mississippi River. High water from the Mississippi River will inundate the drums and surrounding soils. PCBs have a high affinity for soils and can be carried via airborne dusts off-site to nearby residential and industrial areas or wash with runoff into the Mississippi River.

d) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

Contaminants and drums are found outdoors under constant exposure to the weather. Exposure to the elements can cause excessive degradation of remaining on-site waste containers, which could cause further migration of contaminants if hazardous substances leaked. Continued exposure to the elements could lead to further off-site migration of surface contamination. Currently open drums of PCB solid material are located on the bank of the Mississippi River. Continued exposure of surface runoff or a rise in the river water level will lead to further migration of contaminants into the Mississippi River.

IV. ENDANGERMENT DETERMINATION

The presence of hazardous substances on the site represents an imminent and substantial endangerment to public health, welfare, and the environment. Therefore, given the site condition, the nature of the suspected hazardous substances on-site, and the potential exposure pathways described in Section II and III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

Removal activities will require approximately 10 on-site working days to complete. The threats posed by identified drums of

hazardous waste materials meet the criteria listed in Section 300.415(b)(2) of the NCP and are consistent with any removal or remedial action which may be required. To mitigate threats posed by drums of hazardous material on site the following actions are proposed:

1) Develop and implement a Health and Safety Plan to cover removal activities;

2) Develop and implement a sampling and analytical program designed to identify contaminated material;

3) Excavate/consolidate/overpack/stage and dispose of hazardous materials; and

4) Implement necessary backfill and erosion control measures to prevent cap erosion.

Detailed Cleanup contractor costs are presented in Attachment 1. The requested cost adjustment estimated for this Action Memo is summarized in the Estimate Project Cost Table below:

Estimated Project Cost Table

EXTRAMURAL COSTS:	
Cleanup Contractor	$137,100
Contingency (20%)	27,400
Subtotal	$164,500
Total, TAT, including multiplier costs	8,500
Extramural Subtotal	$173,000
Extramural Contingency (15%)	26,000
TOTAL EXTRAMURAL COSTS:	$199,000
INTRAMURAL COSTS:	
U.S. EPA Direct Costs ($30/hr x 228 Regional + 22 HQ hrs)	$ 7,500
U.S. EPA Indirect Costs ($53/hr x 228 Regional hrs)	12,100
TOTAL INTRAMURAL COSTS:	$ 19,600
TOTAL PROJECT CEILING ESTIMATE:	$218,600

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants within the Villages of Sauget and Cahokia, Illinois which may pose an imminent and substantial endangerment to public health and safety, and to the environment and are consistent with the long-term remedial action anticipated for this site. The response actions described in this memorandum do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

The On-Scene Coordinator has begun planning for provision of post-removal site control, consistent with the provisions of the NCP set forth at 40 C.F.R. Section 300.415(k).

All applicable or relevant and appropriate requirements (ARARs) of Federal law will be complied with to the extent practicable. A letter has been sent to Jim Jansen of the IEPA requesting that it identify State ARARs. Any State ARARs identified in a timely manner for this removal action will be complied with to the extent practicable. In accordance with the revised NCP, Section 300.825(a)(1), the response from the state to the request for ARARs will be added to the administrative record for this site once the response has been received and evaluated.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed or non-action may result in increased likelihood of direct contact threat or further contamination which would threaten the adjacent riverine environment. Continued exposure to the elements would allow further migration and deterioration of existing containment, leading to a potential release of site contaminates.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this site.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in an Enforcement Confidential Addendum.

IX. RECOMMENDATION

This decision document represents the selected removal action related to the Sauget Area 2, Site Q, in Sauget, St. Clair County, Illinois, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the site. Conditions at

the site continue to meet the NCP, Section 300.415(b)(2) criteria for a removal action and I recommend your approval of the proposed removal action. The estimated removal project costs are $218,600 of which up to $190,500 could be used for extramural clean-up contractor costs. You may indicate your decision by signing below.

APPROVE: _____ DATE: _____
Associate Division Director
Office of Superfund

DISAPPROVE: _____ DATE: _____
Associate Division Director
Office of Superfund

Enforcement Addendum
Attachments: 1. Detailed Cleanup Contractor Estimate
2. Administrative Record Index

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S. Borries, OSC, HSE-5J
D. Tanaka, ORC, CS-3T
P. Schwebke, Enforcement Specialist

ATTACHMENT 1

DETAILED CLEANUP CONTRACTOR COST ESTIMATE

SAUGET AREA 2 SITE Q
SAUGET, ILLINOIS

The estimated additional cleanup contractor costs are as follows:

Personnel	$ 28,000
Equipment	9,500
Materials	6,400
Subcontractors	21,300
Waste Transportation	16,700
Waste Disposal	55,200
TOTAL	$137,100

ATTACHMENT 2

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
SAUGET AREA 2
SAUGET AND COMPANY LANDFILL, SITE Q
CAHOKIA AND SAUGET, ILLINOIS

DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
5/88	Ecology and Environment	IEPA	Expanded Site Investigtion Report, Dead Creek Proj. Sites, Final Report, Vol, 1 of 2.	478
5/88	Ecology and Environment	IEPA	Expanded Site Investigtion Report, Dead Creek Proj. Sites, Final Report, Vol, 2 of 2.	557
7/29/94	Ecology and Environment	U.S. EPA	Removal Action Report, Sauget Area 2: Site Q, w/ site photographs, analytical data package, and cost projection.	53
8/ /94	Borries, S., U.S. EPA	Muno, W., U.S. EPA	Action Memorandum (Pending)	13

ENFORCEMENT ADDENDUM

Redacted - not relevant to the selection of the removal action.